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010392687 **Image available**

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**Regulating process for load-dependent brake pressure system
in agricultural vehicles - uses fixed desired ideal vehicle deceleration
and recorded characteristic field for momentary load state of tractor to
determine reference factor value in normal area and to fix overall
braking pressure for tractor.**

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Number of Countries: 006 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4429231	C1	19950831	DE 4429231	A	19940818	199539 B
EP 697314 ✓	A2	19960221	EP 95109970	A	19950627	199612
EP 697314	A3	19970312	EP 95109970	A	19950627	199722
EP 697314	B1	20000315	EP 95109970	A	19950627	200018

Priority Applications (No Type Date): DE 4429231 A 19940818

Cited Patents: DE 4007360; DE 4130848; DE 4136571; EP 370671; EP 374484; WO 9002675

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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DE 4429231	C1		7	B60T-008/18	
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EP 697314	B1 G			B60T-007/20	
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Designated States (Regional): FR GB IT NL SE

EP 697314	A2 G		8	B60T-007/20	
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EP 697314	A3			B60T-008/18	
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Abstract (Basic): DE 4429231 C

With regulating deviations in the vehicle deceleration first a reference factor is matched for adjusting the tractor overall braking pressure within a predetermined area band. Only on exceeding this band is a braking pressure of the trailer set initially according to the desired vehicle deceleration matched within a predetermined braking band until the desired vehicle deceleration is achieved and eg the relevant reference factor value again lies in the predetermined normal area band.

The matching of the braking pressure for the trailer is carried out adaptively in stages of about 0.05 bar to 0.2 bar until the reference factor (k) for the overall braking pressure of the vehicle belonging to this changed trailer vehicle braking pressure is again within the normal area band. Where the tractor is fitted with brake pressure sensors , at least for the axles of the tractor , brake characteristic values using wheel speed and brake pressure data are determined from braking processes with different inter-axle brake pressure distribution and an actual brake factor value is determined therefrom for each load state.

USE/ADVANTAGE- For agricultural vehicle combinations with towing vehicle and trailer. The brake pressure can be reliably set even where no sensor data is available from the trailer.

Dwg.1/2

Title Terms: REGULATE; PROCESS; LOAD; DEPEND; BRAKE; PRESSURE; SYSTEM;
AGRICULTURE; VEHICLE; FIX; IDEAL; VEHICLE; DECELERATE; RECORD;
CHARACTERISTIC; FIELD; MOMENTARY; LOAD; STATE; TRACTOR; DETERMINE;

REFERENCE; FACTOR; VALUE; NORMAL; AREA; FIX; OVERALL; BRAKE; PRESSURE;
TRACTOR

Derwent Class: Q18; X22; X25

International Patent Class (Main): B60T-007/20; B60T-008/18

International Patent Class (Additional): B60T-008/00; B60T-008/26;
B60T-008/30; B60T-008/58; B60T-008/60; B60T-013/66

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